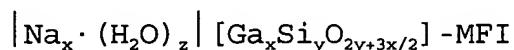


SERIAL NO. _____
JUTTU, SMITH

PATENT APPLICATION
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ABSTRACT

A catalyst of a gallium zeolite on which platinum (Pt/Ga-ZSM-5) has been deposited may be used for aromatization of alkanes having two to six carbon atoms per molecule, such as ethane, propane, butane, etc., to aromatics, such as benzene, toluene and xylenes (BTX). The gallium zeolite contains gallium and silicon in the framework of the zeolite structure. The zeolite structure may be of MFI, FAU, TON, MFL, VPI, MEL, AEL, AFI, MWW or MOR, but preferably, the zeolite has a MFI structure, more preferably is ZSM-5 MFI zeolite. According to the IUPAC recommendations, an example of the sodium form of the zeolite would be represented as:



where $x=0.1-25$; $y=60-100$; and $z=0.1-10$. Platinum may be deposited on the gallium zeolite by ion exchange or impregnation.